

Michigan Department of Environment, Great Lakes, and Energy Materials Management Division

SCRAP TIRE PROGRAM Calendar Year 2020 End Use Memo

TO: Elizabeth Browne, Director

Materials Management Division

FROM: Jeff Spencer, Supervisor

Sustainable Materials Management Unit, Solid Waste Section

DATE: June 22, 2021

SUBJECT: Calendar Year 2020 Scrap Tire Estimated Usage and Capacity

The attached tables represent the best estimate of usage and capacity for existing and potential scrap tire material end-users for calendar year 2020. The information in these tables is based on current registrations issued, reported use for calendar year 2020, and staff knowledge of usage based on market contacts.

There remains a consistent decline in the demand for tire derived fuel (TDF). Most tire processors in Michigan built their business around TDF markets. In 2015, TDF usage was 10,797,719 passenger tire equivalents (PTE) or 121,323 tons. In 2020, TDF usage decreased to 4,717,189 PTE or 53,001 tons. The 2020 TDF usage is a 22.34 percent decrease from that used in 2019.

The Scrap Tire Program remains committed to the development of additional markets. Interest remains in molded and tire chip products. The growth of markets in Michigan remains difficult to predict and will depend on the ingenuity of scrap tire processors in finding or creating new markets as well as the EGLE Scrap Tire Market Development Grants being directed toward the most promising market sectors.

Attachments

cc: Rhonda Oyer, EGLE

Kirsten Clemens, EGLE

REUSE/RETREAD	WDS -	REPORTED USE CY2020		NOTES
		TONS	PTE*	NOTES
Empire Iron Mine (reuse)	Empire Iron Mining			
Marquette, MI	Partnership (Marquette) &			No additional tires added during calendar year (CY) 2020.
mining tire wind barriers	Tilden Mining Co. (Tilden)			calefidal year (CT) 2020.
Detroit Belle Isle (reuse)				
1900 & 1940 Woodbridge	482765			No additional tires added during
Detroit, MI				calendar year (CY) 2020.
Alma Tire (retread)				CY 2017: 21,866 SEMI TIRES
1210 E Superior St	409073			CY 2018: 20,888 SEMI TIRES
Alma, MI				CY 2019: DID NOT REPORT
Belle Tire/Tredroc (retread)				CY 2017: 72,551 SEMI TIRES
3500 Enterprise Dr	497615	2,749.10	244,670	CY 2018: 76,048 SEMI TIRES
Allen Park, MI		•	,	CY 2019: 66,729 SEMI TIRES
BestDrive LLC (retread)				CY 2019 DID NOT REPORT
22100 Trolley Industrial	411858	1043.30	92,854	
Taylor, MI				
Belleroc/Tredroc (retread)				CY 2017: 38,092 SEMI TIRES
2505 Thornwood St SW	470773			CY 2018: 91,960 SEMI TIRES
Wyoming, MI				CY 2019: DID NOT REPORT
Conlan Tire LLC (retread)			+	CY 2017: 3,216 SEMI TIRES
30003 Van Born Rd	494266	1,935.94	172,299	CY 2018: 68,951 SEMI TIRES
Romulus, MI	404200	1,000.01	172,200	CY 2019: 54,646 SEMI TIRES
Dependable Tire (retread)				CY 2017: DID NOT REPORT
12300 Stephens Rd	418950			CY 2018: 21,488 SEMI TIRES
Warren, MI	410330			CY 2019: DID NOT REPORT
Ginman Tire (retread/used)			+	CY 2019: DID NOT REPORT
665 W Clay Ave	497295			CY18: 4,423 SEMI+25,480 LBS BUFF
-	491293			
Muskegon, MI Jerry's Tire (retread)				CY 2019: DID NOT REPORT
· · · · · · · · · · · · · · · · · · ·	470691			CY 2017: 110,330 PTE
2085 W Hill Rd	470091			CY 2017: 22,066 SEMI TIRES
Flint, MI				CY 2018: 22,240 SEMI TIRES
Leslie Tire (retread)	470054			CY 2017: DID NOT REPORT
144 NB Gratiot Ave	470951			CY 2018: 15,089 SEMI TIRES
Mt. Clemens, MI				CY 2019: DID NOT REPORT
Meekhof Tire (retread)	444040			CY 2017: 274,080 PTE
1640 Olson St NE	444349			CY 2017: 54,816 SEMI TIRES
Grand Rapids, MI			1	CY 2018: 63,000 SEMI TIRES
Olson Tire (retread)	474040			CY 2017 : 63,410 PTE
704 E Pickard	471242			CY 2017: 12,682 SEMI TIRES
Mt. Pleasant, MI				CY 2018: 13,487 SEMI TIRES
Shrader Tire & Oil (retread)	00000	0.000.00	000 000	CY 2017: 3,855 SEMI TIRES
25445 Outer Dr	398265	2,283.90	203,267	CY 2018: 45,558 SEMI TIRES
Melvindale, MI				CY 2019: 40,988 SEMI TIRES
Wingfoot (Goodyear)				CY 2017: DID NOT REPORT
147 Morgan Dr	443291		1	CY 2018: 36,710 SEMI TIRES
Howell, MI				CY 2019 DID NOT REPORT
Wonderland Tire (retread)				CY 2017: 175,885 PTE
1233 Cutting Industrial	436529			CY 2017: 35,177 SEMI TIRES
Moline, MI				CY 2018: 34,337 SEMI TIRES
	TOTAL	8,012.24	713,090	*1 semi tire = 5 PTE; 89 PTE / T

LANDFILL	WDS	CALENDAR YEAR 2020		NOTES
		TONS	PTE	NOTES
Brent Run Landfill				
Montrose, MI	406671			Approved to use but not using tires.
ADC				
Central Sanitary Landfill				Approved in license but has not used
Cannonsville, MI	416499			Approved in license but has not used tires.
ADC				uros.
City of Midland Sanitary Landfill,				A
Midland, MI	470453			Approved in license but has not used tires.
ADC				tires.
Dafter Sanitary Landfill				
Chippewa County, MI	451470			Approved in license but has not used tires.
ADC				tiles.
Granger: Wood St. & Grand River				CY 2019 = 179.79 T
Lansing, MI	470523	1078.65	145,094	CY 2018 = 65.10 T
Leachate/Gas Collection				CY 2017 = 654 T
K & W Landfill				
Ontonagon, MI	408328			Approved in license but has not used
ADC				tires
Marquette County Solid Waste				CY 2019 = 180.11 T
Marquette, MI	451188	551.62	49,094	CY 2018 = 290.36 T
certified end-user; ADC			15,55	CY 2017 = 138 T
Ottawa County Farms Landfill				01 2017 - 100 1
Coopersville, MI	403061			Approved in license but has not used
ADC	400001			tires
Peoples Landfill Inc.				
Birch Run, MI	437908			Approved in license but has not used
ADC	437 900			tires
Pitsch Sanitary Landfill				
Belding, MI	407345			
Leachate/Gas Collection/ADC	407345			
Riverview Landfill				OV 0000 DID NOT DEDORT
	200054			CY 2020 - DID NOT REPORT
Riverview, MI ADC	399054			CY 2019 - DID NOT REPORT
Sauk Trail Hills				CY 2018 - DID NOT REPORT
	440440			Approved in license but has not used
Canton, MI	410118			tires.
ADC				
Southeast Berrien County Landfill				
Buchanan, MI	458632			
ADC				
Tri-City Recycling & Disposal				Approved in license but has not used
Carsonville, MI	417640			tires
Vanica Dark Basyaling 9 Disease				
Venice Park Recycling & Disposal	200405			Approved in license but has not used
Lennon, MI	399185			tires
ADC			1	
Westside Recycling and Disposal	40000			
Three Rivers, MI	406807			
Leachate/Gas Collection/ADC				
Tires sent to landfill				
Reported in ReTrac		29,472.10	2,623,017	
by Registered Haulers				
	RTED BY LANDFILLS	1,630.27	194,188	Alternative daily cover (ADC), piping protection
TOTAL LANDI	FILLED BY HAULERS	29,472.10	2,619,012	Tires disposed

TIRE DERIVED FUEL (TDF)	ANNUAL PERMITTED	CALENDAR YEAR 2020		NOTES
TIRE DERIVED FUEL (TDF)	CAPACITY (TONS)	TONS	PTE	NOTES
Genesee Power Station				CY 2019 = 2,801 T
WDS: 463635				CY 2018 = 2,473 T
SRN: N3570	7,300	4,566.66	406,433	CY 2017 = 5,610 T
Title V Air Permit				CY 2016 = 3,286 T
Permit No. 259-06				CY 2015 = 2.025 T
Grayling Generating Station				CY 2019 = 3986 T
WDS: 447905				CY 2018 = 2,927 T
SRN: N2388	16,425	1,590.83	140,584	CY 2017 = 3,952 T
Title V Air Permit				CY 2016 = 3,299 T
Permit No. 882-89E				CY 2015 = 2,343 T
Hillman Power, Hillman				CY 2019 = 4,298 T
WDS: 429049				CY 2018 = 6,873 T
SRN: N1266	20,000	0.00	0	CY 2017 = 7,385 T
Title V Air Permit				CY 2016 = 9,126 T
Permit No. 687-86G				CY 2015 = 9,635 T
L'Anse Warden Electric Co.				CY 2019 = 2,400 T
WDS: 482982				CY 2018 = 4,075 T
SRN: B4260		1,870.21	166,449	CY 2017 = 8,935 T
Title V Air Permit				CY 2016 = 7,386 T
Permit No. 168-07A-B				CY 2015 = 13,565 T
TES Filer City Station				CY 2019 = 5,272 T
WDS: 450616				CY 2018 = 14,615 T
SRN: N1685	35,040	1,136.34	101,134	CY 2017 = 9,737 T
Title V Air Permit				CY 2016 = 19,391 T
Permit No. 519-87F				CY 2015 = 26,813 T
Verso Escanaba				CY 2019 = 26,277 T
WDS: 395326				CY 2018 = 19,483 T
SRN: A0884		20,792.99	1,850,576	CY 2017 = 15,744 T
Title V Air Permit				CY 2016 = 17,420 T
Permit No. 259-06				CY 2015 = 23,366 T
Viking Energy, Lincoln				CY 2019 = 12, 315 T
WDS: 436693				CY 2018 = 11,918 T
SRN: N0890	16,060	12,099.00	1,076,811	CY 2017 = 11,125 T
Title V Air Permit				CY 2016 = 11,524 T
Permit No. 290-86C				CY 2015 = 11,428 T
Viking Energy, McBain				CY 2019 = 10,895 T
WDS: 391703				CY 2018 = 11,886 T
SRN: N1160	16,060	10,944.97	974,102	CY 2017 = 10,670 T
Title V Air Permit				CY 2016 = 11,989 T
Permit No. 261-86G				CY 2015 = 12,798 T
	TOTAL	53,001.00	4,717,089	TOTAL CY 2020 = T

OUT OF STATE USERS *self reported data	CALENDAR YEAR 2020		NOTES
Sen reported data	TONS	PTE	NOTES Material hauled out of state
Out of State (ReTrac, reported by registered haulers)	38,083.72	3,389,451	Material hauled out of state
TOTAL	38,083.72	3,389,451	

OTHER PROPILETS *colf reported data	CALENDAR YEAR 2020		NOTES
OTHER PRODUCTS *self reported data	TONS	PTE	
CM Rubber Technologies WDS: 477858	5,251.00	467,339	DRAINFIELD: 1,067 T USED/GRADE TIRES: 229 T SIDEWALLS/SILAGE: 169 T TDF: 3,784 T MULCH/GROUND COVER: 2 T
Cobalt Holding, LLC WDS: 488250	7,672.17	682,823	CRUMB: 1,955.61 T TDA: 265.39 T MULCH: 1,212.67 T STEEL/TIRE WIRE: 621.83 T SHREDS: 3,616.67 T (OOS)
Deerpath Recyclers WDS: 479633	7,326.62	652,069	CRUMB: 1,895.6 T STEEL/TIRE WIRE: 695.33 T TDF: 2627.65 T MULCH/ADC: 2,108.04 T
Environmental Rubber WDS: 427801	13,885.00	1,235,765	TDF: 13,885 T
First Class Tire Shredders WDS: 471626	8,581.30	763,736	TDF: 8,301.50 T LANDFILLED: 279.80 T
Great American Environmental Services WDS: 447424	1,053.26	93,740	LANDFILLED: 1,053.26 T
Great Lakes Tire Recycling & Recovery LLC WDS: 497821	447.06	39,788	LANDFILL ADC: 447.06 T
Huffman Rubber WDS: 471063	9,452.85	841,304	USED/GRADE TIRES: 206 T SIDEWALLS/SILAGE: 2,146 T FEEDSTOCK OOS: 6,189.22 T LANDFILLED: 911.63 T
Larrys Tire WDS: 497570	5,423.03	482,650	USED/GRADE TIRES: 1,716.49 T SHREDS: 1,423 (OOS) OTR OOS: 43.54 T LANDFILLED: 2,240 T
Mensch Manufacturing WDS: 471180	432.48	38,491	PRODUCT: 164.49 T LANDFILLED: 267.99 T
Silver Lining WDS: 393268	22,921.37	2,040,002	USED/GRADE TIRES:1,059.24 T FEEDSTOCK OOS: 2800.96 T TDF: 2,922.53 T LANDFILL ADC: 16,138.64 T
258 Tire WDS: 496831	192.18	17,104	LANDFILLED: 192.18 T
TOTAL PROCESSED TOTAL SENT TO LANDFILL BY PROCESSORS		7,354,811 2,103,835	ADC: ALTERNATIVE DAILY COVER
TOTAL SERT TO EARDITLE DT FROCESSORS	23,030.00	2,103,033	ADO. ALTERNATIVE DAILT COVER

USE COMPARISON						
	CALENDAR YEAR 2020		CALENDAR YEAR 2019			
TOTALS	TONS	PTE	TONS	PTE		
END USES						
Landfill Usage	1,630.27	194,188	359.89	32,030		
TDF	53,001.00	4,717,089	68,243.36	6,073,659		
TDF - Reported to AQD	Not available at ti	me of report	68,179.23	6,067,951		
TOTAL	54,631.27	4,911,277	68,603.25	6,640,848		
		DIVERSION				
Reuse/Retread	8,012.24	713,090	9,249.93	823,244		
Out of State	38,083.72	3,389,451	37,573.09	3,344,005		
TOTAL	46,095.96	4,102,541	46,823.02	4,167,249		
M	ATERIAL PROCESSED	REPORTED BY	SCRAP TIRE FAC	ILITIES		
AGGREGATE	265.39	23,620	3,812.45	339,308.05		
BUFFINGS	0.00	0	0.00	0.00		
CRUMB	3,851.21	342,758	7,600.84	676,474.76		
DRAINFIELD	1,067.00	94,963	1,312.00	116,768.00		
FEEDSTOCK/SHRED/OOS	14,073.39	1,252,532	8,049.71	716,424.19		
GRANULES	0.00	0	0.00	0.00		
LANDFILL/ADC	23,638.60	2,103,835	NA	NA		
MULCH/GROUND COVER	1,214.67	108,106	1,500.00	133,500.00		
SILAGE/SIDEWALL	2,315.00	206,035	1,697.04	151,036.56		
STEEL/TIRE WIRE	1,317.16	117,227	680.05	60,524.45		
TDF	31,520.68	2,805,341	61,913.95	5,510,341.55		
USED/GRADE TIRES	3,210.73	285,755	3,995.93	355,637.77		
OTHER PRODUCTS	164.49	14,640	0.00	0.00		
TOTAL	82,638.32	7,354,811	90,561.97	8,060,015		
	CY 2020 TON	CY 2020 PTE	CY 2019 TON	CY 2019 PTE		
TOTAL USAGE	183,365.55	16,368,629	205,988.24	18,859,557		

^{*}This table represents the EGLE Scrap Tire Program best estimate of the current usage and capacity of existing and potential scrap tire material end-users. Many end users are not mandated to report tire commodity usage; therefore this table

Glossary

OOS: Out of State User. Tires were generated in Michigan and taken outside the state for use/disposal.

PTE: Passenger Tire Equivalent based on 1 PTE = 22.5 lbs (Increased to 22.5 lbs in 2012 from 20 lbs)

PTI: Permit to Install. The permit required for new or modified equipment or a change in the method of operation of existing equipment which causes certain increases in emissions.

ROP = Renewable Operating Permit. Old PTIs are voided and the conditions are placed into the ROP. New PTIs are also eventually rolled into the ROP for a major source of air emissions.

SRN = State Registration Number, which does not change for a site even when names or numbers change. It is the most certain way to identify correct information for a facility. SRN are used by Air Quality Division as identifiers. End-user means any of the following:

- (i) A person who possesses a permit to burn tires under part 55.
- (ii) The owner or operator of a landfill that is authorized under the landfill's operating license to use scrap tires.
- (iii) A person who uses a commodity to make a product that is sold in the market.
- (iv) A person who is authorized by this part to accumulate scrap tires, who acquires scrap tires, and who converts scrap tires into a product that is sold in the market or reused in a manner authorized by this part.